



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,665	11/21/2005	Silke Goronzy	282728US8XPCT	7991
22850	7590	05/01/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
TO, BAOQU'OC N				
ART UNIT		PAPER NUMBER		
2162				
NOTIFICATION DATE		DELIVERY MODE		
05/01/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

Office Action Summary

Application No.

10/525,665

Applicant(s)

GORONZY ET AL.

Examiner

BAOQUOC N. TO

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 05/25/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-44 are currently pending in this application.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 02/25/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

4. Based on the list guideline below, b to g are missing from the Content of Specification.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.

Art Unit: 2162

- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

Art Unit: 2162

- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 40-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 40 and 41 recite "computer program product" and "computer readable storage medium" appear to be program per se or software per se.

Claim Objections

6. Claim 30 is objected to because of the following informalities: There are no steps a to b in claim 29. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-2, 4-12, 14-21, 24-26, 28 and 34-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thint et al. (US. Patent No. 7,243,105 B2) in view of Dagtag et al. (US. Patent No. 6,859,803 B2).

As to claim 1, Thint discloses a method to create a user profile that comprises a list of word-weight pairs or more general key structures, characterized by the step of computing the weights based on user features that represent a typical general behavior of an individual user in respect to the application where the user profile is used (..., ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). Thint does not explicitly a list of word-weight pairs or more general key structures; however, Dagtag discloses a list of word-weight pairs (each word pair in word pair database 450 has an assigned word pair weight factor. The word pair weight factor is a number that reflects the relative significance or importance of a particular word pair...) (col. 9, lines 14-23). This suggests a list of word-weight pairs. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Thint to include a list of word-weight pairs as disclosed by Dagtag in order to retrieve document based on the keyword pair.

As to claim 2, Thint discloses the method according to claim 1, characterized by the step of evaluating an influence of the user features from a user history (col. 5, lines 41-46).

As to claim 3, Thint discloses the method according to claim 1 excepting for characterized by the step of determining words to be included in the list of word-weight pairs on basis of words included in program descriptions of previous selections by the user; however, Dagtag discloses characterized by the step of determining words to be included in the list of word-weight pairs on basis of words included in program descriptions of previous selections by the user Dagtag discloses a list of word-weight pairs (each word pair in word pair database 450 has an assigned word pair weight factor. The word pair weight factor is a number that reflects the relative significance or importance of a particular word pair...) (col. 9, lines 14-23). This suggests a list of word-weight pairs. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Thint to include a list of word-weight pairs as disclosed by Dagtag in order to retrieve document based on the keyword pair.

As to claim 5, Thint discloses the method according to claim 4, characterized by the step of determining further words to be included in the list of word-weight pairs on basis of a database evaluation of co-occurrences of words already included in the list (col. 10, lines 55-65).

As to claim 6, Thint discloses the method according to claim 4, characterized by the step of computing a weight of a word to be included in the list of word-weight pairs

on basis of a comparison of an inverse document frequency of said word with respect to all available program descriptions and an inverse document frequency of said word with respect to program descriptions of previous selections by the user (col. 10, lines 55-65).

As to claim 7, Thint discloses the method according to claim 4, characterized by the step of computing weights of words to be included in the list of word-weight pairs as a product of importance of the word with respect to all program descriptions of previous selections by the user, and at least one of the following terms: a constant term, in particular one, importance of the word with respect to the program description in which the word is included, importance of the word with respect to all available program descriptions, and a correctional factor that depends on the length of the program description in which the word is included and the frequency of the word in this program description (col. 8, lines 45-50).

As to claim 8, Thint discloses the method according to claim 7, characterized in that the importance of a word with respect to all program descriptions of previous selections by the user is determined on basis of the portion of the word in the set of all words of the program descriptions of previous selections by the user (col. 8, lines 45-50).

As to claim 9, Thint discloses the method according to claim 8, characterized in that the importance of a word with respect to all program descriptions of previous selections by the user is determined under consideration of the program description in which the word is included (competent, good, expert) (col. 6, line 54).

As to claim 10, Thint discloses the method according to claim 7, characterized in that the importance of the word with respect to the program description in which the word is included is determined on basis of occurrences of the word in said program description (col. 10, line 60).

As to claim 11, Thint discloses the method according to claim 7, characterized in that the importance of the word with respect to all available program descriptions is determined on basis of its inverse document frequency in respect to all available program descriptions (col. 10, lines 60).

As to claim 12, Thint discloses the method according to claim 11, characterized in that the importance of a word with respect to all available program descriptions is determined under consideration of the program description in which the word is included (competent, good, expert) (col. 6, line 54).

As to claim 14, Thint discloses the method according to claim 7 excepting for characterized by the step of normalizing a weight of a word included in the list of word-weight pairs by a behavior of the user to stay with a selection and to switch selections off or to switch on/off just for this selection; however, Dagtag discloses characterized by the step of normalizing a weight of a word included in the list of word-weight pairs by a behavior of the user to stay with a selection and to switch selections off or to switch on/off just for this selection (... ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). Thint does not explicitly a list of word-weight pairs or more general key structures; however, Dagtag

discloses a list of word-weight pairs (each word pair in word pair database 450 has an assigned word pair weight factor. The word pair weight factor is a number that reflects the relative significance or importance of a particular word pair...) (col. 9, lines 14-23). This suggests a list of word-weight pairs. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Thint to include a list of word-weight pairs as disclosed by Dagtag in order to retrieve document based on the keyword pair.

As to claim 15, Thint discloses the method according to claim 7 excepting for characterized by the step of normalizing a weight of a word included in the list of word-weight pairs by a behavior of the user when to actually consume a recorded selection; however, Dagtag discloses characterized by the step of normalizing a weight of a word included in the list of word-weight pairs by a behavior of the user when to actually consume a recorded selection (... ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). Thint does not explicitly a list of word-weight pairs or more general key structures; however, Dagtag discloses a list of word-weight pairs (each word pair in word pair database 450 has an assigned word pair weight factor. The word pair weight factor is a number that reflects the relative significance or importance of a particular word pair...) (col. 9, lines 14-23). This suggests a list of word-weight pairs. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Thint

to include a list of word-weight pairs as disclosed by Dagtas in order to retrieve document based on the keyword pair.

As to claim 16, Thint discloses the method according to claim 7, characterized by the step of averaging the weights $w_{sub.i(t)}$ of a word over all program descriptions of previous selections by the user in which the word occurs to a weight $w(t)$ of the new profile (col. 6, lines 44-63).

As to claim 17, Thint discloses the method according to claim 7 excepting for characterized by the step of excluding words from the list of word-weight pairs which show a weight below a predetermined threshold or within a predetermined lower range of weights; however, Dagtag discloses characterized by the step of excluding words from the list of word-weight pairs which show a weight below a predetermined threshold or within a predetermined lower range of weights (... ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). Thint does not explicitly a list of word-weight pairs or more general key structures; however, Dagtas discloses a list of word-weight pairs (each word pair in word pair database 450 has an assigned word pair weight factor. The word pair weight factor is a number that reflects the relative significance or importance of a particular word pair...) (col. 9, lines 14-23). This suggests a list of word-weight pairs. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Thint to include a list of word-weight pairs as disclosed by Dagtas in order to retrieve document based on the keyword pair.

As to claim 18, Thint discloses the method according to claim 6, characterized by the step of computing a weight of a word to be included in the list of word-weight pairs by considering negative selections of the user (low) (col. 6, line 55).

As to claim 19, Thint discloses the method according to claim 6 excepting for characterized by the step of computing a weight of a word to be included in the list of word-weight pairs by considering a maximum frequency of possible user selections in respect to certain user features; however, Dagtag discloses characterized by the step of computing a weight of a word to be included in the list of word-weight pairs by considering a maximum frequency of possible user selections in respect to certain user features (..., ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). Thint does not explicitly a list of word-weight pairs or more general key structures; however, Dagtas discloses a list of word-weight pairs (each word pair in word pair database 450 has an assigned word pair weight factor. The word pair weight factor is a number that reflects the relative significance or importance of a particular word pair...) (col. 9, lines 14-23). This suggests a list of word-weight pairs. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Thint to include a list of word-weight pairs as disclosed by Dagtas in order to retrieve document based on the keyword pair.

As to claim 20, Thint discloses the method according to claim 4, characterized in that the created user profile is used as a query in possible future program descriptions to suggest at least one possible future selection to the user (col. 5, lines 65-67).

As to claim 1, Thint discloses the method according to claim 20, characterized in that for each possible future program description a modified OKAPI weight is computed, wherein each matching word has its weight as a co-factor so that the search result is influenced according to the user profile.(col. 4, lines 60-67).

As to claim 24, Thint discloses the method according to claim 20, characterized in that the query is built by combining a stereotype user profile and the created user profile, wherein initially, when providing the suggestion for the first time, the stereotype user profile is used alone, within a first predetermined period during the collection of data for computing the created user profile a linear combination of both user profiles is used, and after said first predetermined period during the collection of data for computing the created user profile the created user profile is used (... ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58).

As to claim 25, Thint discloses the method according to claim 24, characterized in that the stereotype user profile comprises a generic stereotype profile which describes an average interest in everything and at least one specific stereotype profile each defining interests of a user who focuses on a specific topic (topic) (col. 7, lines 23-27).

As to claim 26, Thint discloses the method according to claim 25, characterized in that a weight with which a specific stereotype user profile is considered during the linear combination to provide said suggestion is computed by matching the user selections with the data in the respective specific stereotype and increasing the weight of the stereotype if a match is found (high) (col. 6, lines 56)..

As to claim 28, Thint discloses method according to claim 20, characterized in that the query is built under consideration of a filtered user profile by filtering a user history which is used to create the user profile, and/or the user profile (col. 5, lines 1-7), and/or the suggestion results based on an actual situation of the user represented on basis of user features that represent a typical general behavior of an individual user in respect to the application where the user profile is used.

As to claim 34, Thint discloses the method according to claim 1 characterized in that said general key structure includes a forgetting factor (col. 6, lines 64-67).

As to claim 35, Thint discloses the method according to claim 1, characterized in that a future program comprises a stored personal content (col. 6, lines 64-67).

As to claim 36, Thint discloses the method according to claim 1, characterized in that it is used in an audio/video program suggestion engine (col. 6, line 21).

As to claim 37, Thint discloses the method according to claim 36, characterized in that said audio/video program suggestion engine is internet based (internet) (col. 6, line 21).

As to claim 38, Thint discloses the method according to claim 1, characterized in that it is client based (client terminal 300-310) (col. 5, lines 66-67).

As to claim 39, Thint discloses method according to claim 1, characterized in that said user features comprise one or more of the following features: preferred channel of audio/video program consumed by the user, typical time to consume an audio/video program by the user, length of consuming an audio/video program by the user in relation to the total length of the audio/video program, time of beginning the consume of an audio/video program by the user in relation to a start time of the audio/video program, typical length of consuming an audio video program by the user in relation to the time of consuming, relation between how often a particular audio/video program is consumable and how often it is consumed by the user, general audio/video program consuming behavior of the user, in particular in relation to a switch-on time and length of a used audio/video device, audio/video programs recorded by the user, time duration between the recording of a particular audio/video program by the user and the consuming of said audio/video program by the user, actual mood of the user, actual wish of audio/video program entered by the user, year of production of an audio/video program consumed by the user, director and/or actor and/or group of actors of an audio/video program consumed by the user, type of an audio/video program consumed by the user, and title of an audio/video program consumed by the user.

As to claim 40, Thint discloses a computer program product, comprising computer program means adapted to perform the method steps as defined in claim 1

when being executed on a computer (client terminal) (col. 5, line 67) micro processor, digital signal processor, or the like including home server, set-top-box, TV, VCR, PDA.

As to claim 41, Thint discloses computer readable storage medium, storing thereon a computer program product according to claim 40 (memory in client terminal) (col. 5, line 67).

8. Claims 3 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thint et al. (US. Patent No. 7,243,105 B2) in view of Dagtag et al. (US. Patent No. 6,859,803 B2) and further in view of Bala et al. (Pub. No. US 2002/0056091 A1).

As to claims 3 and 27, Both Thint and Dagtag discloses the method according to claim 24, wherein after a second predetermined period the query is built by an individual user profile created from a multi-user profile that comprises a list of word-weight pairs excepting for characterized by the step of at least once splitting the multi-user profile according to user features that represent a typical general behavior of an individual user in respect to the application where the user profile is used; however, Bala discloses characterized by the step of at least once splitting the multi-user profile according to user features that represent a typical general behavior of an individual user in respect to the application where the user profile is used (the information in the user profile, or a sub-set of it, can be used to generate an individual file for each user for the local monitoring of the network interaction) (paragraph 0039). This suggests breaking a user profile into multi part user profile. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching both Thint and

Dagtag to include breaking a user profile into multi part user profile as disclosed by Bala in order to allow the system to suggest the content based one of the user profile.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bala et al. (Pub. No. US 2002/0056091 A1) in view of Dagtas et al. (Patent No. 6,859,803 B2).

As to claim 29, Bala discloses a method to create an individual user profile from a multi-user profile that comprises

characterized by the step of at least once splitting the multi-user profile according to user features that represent a typical general behavior of an individual user in respect to the application where the user profile is used (the information in the user profile, or a sub-set of it, can be used to generate an individual file for each user for the local monitoring of the network interaction) (paragraph 0039). Bala does not disclose a list of word-weight pairs; however, Dagtas discloses a list of word-weight pairs (each word pair in word pair database 450 has an assigned word pair weight factor. The word pair weight factor is a number that reflects the relative significance or importance of a particular word pair...) (col. 9, lines 14-23). This suggests a list of word-weight pairs. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Bala to include a list of word-weight pairs as disclosed by Dagtas in order to retrieve document based on the keyword pair.

10. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bala et al. (Pub. No. US 2002/0056091 A1) in view of Dagtas et al. (Patent No. 6,859,803 B2) and further in view of Thint et al. (US. Patent No. 7,243,105 B2).

As to claim 30, Bala and Dagtas disclose a method according to claim 29 excepting for characterized in that for splitting the multi-user profile the following steps are performed: e) performing a tentative split according to user features to generate a first and a second sub user profiles, f) calculating the relative difference between the two sub user profiles, g) performing steps a) and b) until all or a predetermined number of tentative splits are performed, and h) splitting the multi-user profile according to that tentative split that yields the highest relative difference in case said relative difference lies above a predetermined threshold. However, Thint discloses characterized in that for splitting the multi-user profile the following steps are performed: e) performing a tentative split according to user features to generate a first and a second sub user profiles, f) calculating the relative difference between the two sub user profiles, g) performing steps a) and b) until all or a predetermined number of tentative splits are performed, and h) splitting the multi-user profile according to that tentative split that yields the highest relative difference in case said relative difference lies above a predetermined threshold (... ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). This suggests calculating the weight based on the user features. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to

modify teaching of Martino to include calculating the weight based on the user features as disclosed by Thint in order to allow better result based on the improved user profile.

As to claim 31, Bala and Dagtas discloses the method according to claim 30 excepting for characterized in that said relative difference is calculated by calculating a difference of a first discrete probability distribution of the first sub user profile over the user features that are contained therein and of a second discrete probability distribution of the second sub user profile over the user features that are contained therein. However, Thint discloses characterized in that said relative difference is calculated by calculating a difference of a first discrete probability distribution of the first sub user profile over the user features that are contained therein and of a second discrete probability distribution of the second sub user profile over the user features that are contained therein (... , ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). This suggests calculating the weight based on the user features. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Martino to include calculating the weight based on the user features as disclosed by Thint in order to allow better result based on the improved user profile.

As to claim 32, Bala and Martino discloses the method according to claim 31 excepting for characterized in that said difference of said two discrete probability distributions is calculated using the symmetrized Kulback-Leibler-distance sum, where events which happen zero times are replaced by one virtual occurrence or where only

Art Unit: 2162

events which happen at least once in both distributions are taken into account; however, Thint discloses characterized in that said difference of said two discrete probability distributions is calculated using the symmetrized Kulback-Leibler-distance sum, where events which happen zero times are replaced by one virtual occurrence or where only events which happen at least once in both distributions are taken into account (...), ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). This suggests calculating the weight based on the user features. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Martino to include calculating the weight based on the user features as disclosed by Thint in order to allow better result based on the improved user profile.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claim 33 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Martino et al. (Pub. No. US 2003/0126108 A1).

As to claim 33, Martino discloses method to specify a suggestion for a next selection of a user, which suggestion is determined on basis of suggestion results which are computed of future program descriptions and a user profile, characterized by the step of filtering a user history which is used to create the user profile, and/or the user profile, and/or the suggestion results based on an actual situation of the user represented on basis of user features that represent a typical general behavior of an individual user in respect to the application where the user profile is used (various "recommenders," utilities suggesting items to a user based on the user's likes and dislike, are employed for suggesting television programming, music, books or other items..." (paragraph 0007).

As to claim 43, Martino discloses suggestion engine to specify a suggestion for a next selection of a user, which suggestion is determined on basis of suggestion results which are computed of future program descriptions and a user profile, characterized by being adapted to perform the method steps as defined in claim 33 (recommenders may employ a specific user's profile) (paragraph 0007).

12. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martino et al. (Pub. No. US 2003/0126108 A1) in view of Thint et al. (US. Patent No. 7,243,105 B2).

As to claim 44, Martino does not disclose a suggestion engine according to claim 43, characterized by a profiler to perform the step of computing the weights based on user features that represent a typical general behavior of an individual user in respect to

the application where the user profile is used; however, Thint discloses a suggestion engine according to claim 43, characterized by a profiler to perform the step of computing the weights based on user features that represent a typical general behavior of an individual user in respect to the application where the user profile is used (... ii. generating a set of personalized rule weightings according to a second set of rules and with reference to a set of user preference data, iii. receiving event statistic relating to a user's activity...) (col. 3, lines 43-58). This suggests calculating the weight based on the user features. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify teaching of Martino to include calculating the weight based on the user features as disclosed by Thint in order to allow better result based on the improved user profile.

Allowable Subject Matter

13. Claims 13 and 22-23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041, or unofficial fax number for the purpose of discussion (571) 273-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

Art Unit: 2162

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) 273-8300 [Official Communication]

/Baoquoc N To/

Primary Examiner, Art Unit 2162

April 27th, 2008